

# **FINAL REPORT**

## **SOLID WASTE WITH VERMICULITE REMOVAL PROJECT**

**Concrete Bunker Structure  
EMR Project No. 9458.001  
Troy, MT**

**FOR  
BNSF RAILWAY COMPANY  
CORPORATE INDUSTRIAL HYGIENE  
FORT WORTH, TEXAS**



**October 2010**

## **TABLE OF CONTENTS**

<b>SECTION I</b>	<b>PROJECT COMPLETION SHEET</b>
<b>SECTION II</b>	<b>SECTION 01010 – SCHEDULE OF WORK</b>
<b>SECTION III</b>	<b>SECTION 01013 – SUMMARY OF WORK</b>
<b>SECTION IV</b>	<b>AIR MONITORING DATA</b>
<b>SECTION V</b>	<b>ABATEMENT CONTRACTOR CLOSEOUT DOCUMENTS</b>

## **SECTION I**

### **EMR PROJECT COMPLETION SHEET**

**EMR presents Section I to provide the project completion sheet, which identifies site location, listing of ACM & Vermiculite removed and waste disposal site at: Concrete Bunker Structure - EMR Project No. 9458.001, Troy, MT.**

# EMR ASBESTOS PROJECT COMPLETION SUMMARY SHEET

Project No.: 9458.001 Date of Completion: 10-11-2010 BNSF Work Order No.: \_\_\_\_\_

Project Name: SOLID WASTE CLEANUP W/ VERMICULITE DEBRIS

Address/Location: TROY, MT

EMR Project Site Manager (s): DAVID L. WELCH Signature: [Signature]

Asbestos Removal Contractor: IRS ENVIRONMENTAL

Contractor Supervisor Name: SAM WANNAMAKER Signature: [Signature]

BNSF Site Contact Name: MICHAEL PERRODIN Signature: \_\_\_\_\_

BNSF Site Contact Person Inspected Project Site Upon Completion? (check one): Yes: ☐ No: ☒

If not inspected, comments/reason: NOT AVAILABLE

ACM Waste Disposed at (Landfill name/location): FLATWOOD COUNTY SOLID WASTE DISTRICT, KALISPELL, MT

Dates of Work: 10-11-2010 No. of Work Days to Complete Project: 1

Listing of ACM Removed (see Sections 01010 and 01013 from Specifications Documents; report in linear feet, square feet, no. of fittings, etc.)

Sample No.	Material Description	Location	Quantity Removed	Actual Quantity Remaining	Reason for Removal*
TRMT-068-900	SOIL W/ VERMICULITE	CONCRETE BULKHEAD FLOOR	4 CY.	Ø	N/A

\* Reasons for removal are: D=removal required for demolition of building (this does not include demolition of inactive systems in a building that will remain standing); R= removal required prior to renovation; P=removal as a part of the planned system-wide removal of ACM in the workplace.

\*\* If material remains, list amount and place.

ASBESTOS NOTICE POSTINGS: Removed (all ACM abated)

New Posting Required

Old Posting Removed

Yes \_\_\_\_\_

Yes \_\_\_\_\_

Yes \_\_\_\_\_

No \_\_\_\_\_

No \_\_\_\_\_

No \_\_\_\_\_

## **SECTION II**

### **SECTION 01010 – SCHEDULE OF WORK**

**EMR presents Section II to provide the schedule of work for the asbestos & vermiculite removal project at: Concrete Bunker Structure - EMR Project No. 9458.001, Troy, MT.**

## Section 01010 – Schedule of Work

### Part 1 – General

The BNSF Railway Company (BNSF) – Concrete Bunker structure is an abandoned concrete foundation structure. On the north end of the structure is a basement-like room that has been accessed by trespassing juveniles. The floor of the space is surfaced partially with concrete and partially with dirt. The dirt has some residual vermiculite debris. The areas beyond the work area control barriers may be occupied during the proposed asbestos removal project. The structure is located near the south end of the BNSF Rail Yard, east of St. Regis Haul Road and Old Mill Road intersection and the BNSF right-of-way in Troy, Montana. Restrict access to the area as required. Coordinate and cooperate with the owner and his staff to keep disruptions to a minimum. Schedule work activity to complete the projects as soon as possible. It is essential that asbestos removal projects be completed within the scheduled time period. The Owner's Representative is:

EMR, Inc.  
Mr. Ric Cook, Project Manager  
Mr. David L. Welch, Project Designer  
Mr. David L. Welch, Project Site Manager 425-512-5510 (cell)  
3200 Haskell Avenue, Suite 140  
Lawrence, KS 66046-8945  
☎ (785) 842-9013  
Fax: (785) 560-2756

All project correspondence shall be forwarded through the above address. The project is being performed for BNSF Railway.

The company asbestos managers are:

Mr. Michael Perrodin  
Manager Environmental Operations  
BNSF Railway  
235 Main Street  
Havre, WA 59501  
☎ (406) 265-0483  
Fax (406) 265-0356

Dave Smith  
Manager Environmental Remediation  
BNSF Railway  
139 Last Chance Gulch  
Helena, MT 59601  
☎ (406) 256-4046  
Fax (406) 449-8610

The project is being performed under a Work Order Authorization to the Master Services Agreement between the successful bidder and BNSF Railway.

The site address is:

Concrete Bunker Structure  
East of St. Regis Haul Road/Old Mill Road Intersection, East of BNSF track right-of-way  
48°72'42.65"N Latitude  
115°53'13.71" W Longitude  
Troy, MT 59935

The railroad company site contacts (are):

Mr. Michael Perrodin  
Manager Environmental Operations  
BNSF Railway  
235 Main Street  
Havre, WA 59501  
☎ (406) 265-0483  
Fax (406) 265-0356

Dave Smith  
Manager Environmental Remediation  
BNSF Railway  
139 Last Chance Gulch  
Helena, MT 59601  
☎ (406) 256-4046  
Fax (406) 449-8610

Coordinate daily activities and building operations with the railroad company site contacts.

BNSF Railway may have personnel working in areas beyond the project perimeter during the course of this project. It is essential that the contractor coordinate daily activities with BNSF site personnel. The contractor shall provide all state and federal notifications required of the building owner and others as required. **The contractor shall comply with BNSF'S "Safety Rules and General**

Responsibilities" for all outside contractors. BNSF safety regulations while on company property include, but are not limited to using proper fall protection, wearing of approved hard hats, safety glasses, steel toe footwear & high visibility vest by all personnel on the work-site.

**IMPORTANT ISSUE!!!!!!!!!!!!** Supervisor and Workers will not be allowed on railroad property if not certified under the BNSF's Contractor Orientation Program (see below). If the contractor is found to be non-compliant, they will be told to leave the property. The contractor will incur all costs affecting the delay of the project.

All contract labor workers performing work on BNSF property must have undergone BNSF Contractor Orientation prior to working on any BNSF property. The presence of workers within 25 feet of any rail outside of a building must be specifically authorized by the local Roadmaster. All such authorizations should be coordinated by the Owner's Representative (EMR). All workers must possess an identification card documenting their individual completion of the orientation program. BNSF Contractor Orientation is available on the Worldwide Web at [www.contractororientation.com](http://www.contractororientation.com).

In addition to Contractor Orientation, the BNSF Railway has implemented additional procedures to better control, secure and protect their operations. In order to meet the government security recommendation and directives, BNSF has initiated a 3-step process including a background screening program, security awareness training and photo identification badge for all qualified service providers. Participation in this program is required to operate on BNSF property. Your company must register with the e-RAILSAFE program. The web access is [www.e-RAILSAFE.com](http://www.e-RAILSAFE.com). Each service provider will initiate an individual relationship with e-RAILSAFE and be responsible for all charges incurred as a result of the program.

## **Part 2 – Scope**

1. The following asbestos-containing materials are known to be present at the work site and are included in the scope of this project. If any other materials are found which are suspected of containing asbestos, notify immediately the Owner's Representative. All of the identified asbestos-containing materials and debris are to be removed.

### **Troy, MT Concrete Bunker Cleanout (EMR Project Number 9458-001)**

- Remove approximately 3-4 cubic yards (CY) of soil with vermiculite debris from concrete bunker room on north end of structure..  
**Sample: TRMT-CCB-900 (Assumed Trace/<1% Tremolite Asbestos)**

#### **Friable Removal Procedures (Vinyl Sheet Flooring and Attached Wood Underlayment):**

- Unbolt steel plate from west side of structure
- Remove steel plate covering stairwell on top of structure
- Set up caution tape perimeter for work area
- Construct a remote 2-Stage decontamination unit/change facility
- Wet shovel soil with vermiculite debris and double bag
- Continuous misting using an airless sprayer during wet shoveling procedures.
- HEPA vacuum concrete floor areas and concrete steps into bunker room
- Perimeter air monitoring and personal air monitoring will be conducted. Air Clearance sampling not required.
- Visual inspection.
- After Removal Procedures, re-bolt steel plate to discourage access by juvenile trespassers and re-position steel plate over stairwell access.

#### **General Notes:**

- Coordinate all activities with all EMR contacts.
- Power and water are not available. Contractor must have adequate power resources to operate the HEPA vacuum equipment, halogen lighting and the Owner's representative's high volume pumps for perimeter air sampling.
- Contractor will provide adequate lighting to aid in the removal process, final cleanup/detailing, and visual inspection.
- Pre-clean the work area per Section 01013, Part 1- General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title a-1: Pre-cleaning of Interior Areas.
- Isolate the work area per Section 01013, Part 1-General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title b-1: Isolation of Interior Areas.
- Prepare a work area enclosure per Section 01013, Part 1 – General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title c-1: Preparation of Interior Enclosures; Full Negative Pressure Enclosure.

- BNSF track protection is NOT REQUIRED for the project. Access the site from Old Mill Road on the east side of the BNSF right-of-way.
- 2. There are no notification requirements.
- 3. The quantity of material to be removed is to be verified by the contractor.
- 4. There is no pre-cleaning required. Concrete floors and steps will be cleaned with HEPA vacuums as part of the bunker cleanout activities.
- 5. Contractor shall conduct removal procedures in all functional areas in a "state-of-the-art manner." Critical barriers are not required. Waste will go to a landfill as non-ACM solid waste outside of Lincoln County.
- 6. Owner Representative will be on-site to oversee project to insure compliance with specification and regulations during removal activity.
- 7. Perimeter area and OSHA personal air monitoring is required for this project and will be provided by the owner's representative using phase contrast microscopy (PCM). Contractor will provide personal pumps for OSHA compliance sampling. Owner's Representative will do analysis of contractor's personal samples by PCM. No work shall be conducted without an air monitoring technician present on site.
- 8. Make sure all signs and project barriers are maintained throughout the duration of the project.
- 9. Contractor shall proceed in work areas as scheduled and/or authorized by Owner and Owner's Representative. Changes in the work schedule shall be made by written communication.

Remove all asbestos materials by the methods listed above following the state-of-the-art procedures of the asbestos industry (see Sections 01013, 01560, 01561, 01526, 01527). All asbestos-containing and/or contaminated materials shall be properly removed and disposed of as asbestos waste.

### **Part 3 – Schedules**

The work will be scheduled during daylight hours Monday-Friday. The schedule for removal activities is to take place in October 2010.

### **Part 4 – Disposal**

Disposal of all soil and vermiculite debris shall be disposed at a solid waste landfill as non-ACM outside of Lincoln County. All waste must be manifested to the licensed landfill and waste disposal records shall be a part of final reports submitted to EMR.

### **Part 5 – Project monitoring and air monitoring hours:**

The Owner's Representative will provide third-party air monitoring services. Coordinate project activities with the Owner's Representative to facilitate air monitoring services. Air monitoring for this project shall include air sampling and monitoring of work activities, and work areas during project execution. The Owner's Representative will provide for air monitoring of project personnel and provide results to the contractor on a daily basis. However, the Contractor will provide personal pumps for OSHA compliance sampling. The Owner's Representative will do analysis of contractor's personal samples by PCM. No abatement work activity shall be allowed without air monitoring being conducted. The Owner's Representative will conduct the air sampling and monitoring during all hours that the Contractor's personnel are on the project site, during abatement activities. The daily project air sampling will be the responsibility of the Owner's Representative on a per shift basis.

The Owner's Representative has authority over daily scheduling and progression of work through completion of the project. The Contractor's work crew shall work shifts as necessary on the project site to complete the project on the prescribed time schedule. Provide the air monitoring service advance notice of anticipated work schedule.

PCM analysis by NIOSH method 7400 will be conducted on-site for all background, area, personal and clearance samples, unless otherwise directed by the state regulatory agency. Final air clearance for the project work area shall be a contamination level within the work area that is less than or equal to 0.01 fibers per cubic centimeter (0.01 f/cc) per the NIOSH 7400 method.

**END OF SECTION 01010**



## **SECTION III**

### **SECTION 01013 – SUMMARY OF WORK**

**EMR presents Section III to provide the Summary of Work, which describes the work activity required as part of the asbestos & vermiculite removal at: Concrete Bunker Structure - EMR Project No. 9458.001, Troy, MT.**

## **Section 01013 – Summary of work — asbestos abatement**

### **Part 1 – General**

Related documents:

Drawings, general provisions of the Contract, including Supplementary Conditions, and other Division-1 Specification sections, apply to work of this section.

Project/work identification:

General: Project name is Asbestos Removal Project, BNSF Railway, Concrete Bunker Structure, Project No. 9458.001, Troy, Montana as shown on Contract Documents prepared by David L. Welch, a Montana certified Project Designer (#MTA-1960-PD, exp. 11/30/10), Owner's asbestos abatement design representative, EMR, Inc., Lawrence, Kansas, Project Specifications.

Contract documents: Indicate the work of the contract and related requirements and conditions that have an impact on the project. Related requirements and conditions that are indicated on the Contract Documents include, but are not necessarily limited to the following:

- Applicable codes and regulations
- Montana Asbestos Control Program Regulations.
- Notices and permits
- Existing site conditions and restrictions on the use of the site
- Work performed prior to work under this Contract
- Work to be performed subsequent to work under this Contract
- EMR, Inc. — Asbestos Abatement — General Specifications

The work includes removal of all identified ACM and disposal of all asbestos materials according to the following specifications in the sequence indicated.

General and Administrative Requirements: are set forth in the following specification sections:

- 01010 — Schedule of Work
- 01013 — Summary of Work
- 01043 — Project Coordination
- 01091 — Definitions and Standards
- 01301 — Submittal
- 01313 — Schedules and Reports
- 01601 — Materials and Equipment
- 01632 — Products Substitutions
- 01701 — Project Closeout

Abatement Work: requirements are set forth in the following sections, listed here according to the sequence of the work:

01092 — Applicable Codes, Asbestos Abatement: sets forth governmental regulations if more stringent and industry standards which are included and incorporated herein by reference and made a part of the specification. This section also sets forth those notices that either must be applied for and received, or which must be given to governmental agencies before start of work.

**SPECIAL NOTE:** Federal and State asbestos regulations supersede any requirements of these specifications. The contractor's certified supervisor shall be required to have a copy of State regulations and project notice at the project site, as required.

01410 — Test Laboratory Services: describes air monitoring by owner so that the building beyond the work area will remain uncontaminated. Air Monitoring to determine required respiratory protection is the responsibility of the Contractor.

01503 — Temporary Facilities: sets forth the support facilities needed such as electrical and plumbing connections for the decontamination unit.

01513 — Negative Pressure System: A local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air outside the work area. sets forth the procedures to set up the negative air machines and ventilation of the work area.

01526 — Temporary Enclosures: describes sequence of work for building of an enclosure, control access, and extension of work area.

01527 — Local Area Protection: Preparing a work area for removal using glovebags, mini-enclosure, non-friable removal, and controlled access work environment.

01560 — Worker Protection: This section describes the equipment and procedures required for protecting workers against asbestos contamination and other workplace hazards except for respiratory protection.

01561 — Worker Protection, Repair & Maintenance: Describes the equipment and procedures for protecting workers against asbestos contamination and other workplace hazards in repair, maintenance, glovebag and non-friable asbestos material activities.

01562 — Respiratory Protection: Instruct and train each worker involved in asbestos abatement or maintenance and repair of friable asbestos-containing materials in proper respiratory use and require that each worker always wear a respirator, properly fitted on the face.

01563 — Decontamination Units: explains the setup and operation of the personnel and material decontamination units.

Asbestos Removal Work Procedures: are described in the following specification sections:

02081 — Removal of Asbestos-containing Materials

02084 — Disposal of Asbestos-containing Materials

Decontamination of the Work Area: after completion of abatement work is described in the following sections:

01701 — Project Closeout: details the closeout procedures to end the project once abatement work is complete including final paperwork requirements.

01711 — Project Decontamination: describes the sequence of cleaning and decontamination procedures to be followed during removal of the sheet plastic barriers isolating a work area. Provides for certificates of visual inspection documentation.

01712 — Cleaning and Decontamination Procedures: sets forth procedures to be used on contaminated objects and rooms that are not part of an abatement work area.

01714 — Work Area Clearance: describes the analytical methods used to determine if the work area has been successfully cleaned of contamination.

#### **A. Personnel Submittal**

1. The contractor and all workers must be trained and AHERA certified as evidenced by participation and successful completion of a training course, offered by an EPA or State endorsed educational institution. (Submittal of Copies of Certifications — Required — State Government issued Asbestos certifications will satisfy requirements of this section).
2. Submit certification to the Owner's Representative indicating that each employee has had instruction on the hazards of asbestos exposure, the use and fitting of respirators, protective dress, use of showers, entry and exit from all work areas, and on all aspects of work procedures and protective measures as specified herein and that each employee understands this information. Use the "Certificate of Worker's Acknowledgment" located at the end of this section. (Submittal of the signed "Certificate of Worker's Acknowledgment" — Required unless State worker certifications are submitted).
3. Submit evidence of required physical examinations.

**B. Respiratory Protection Systems**

1. The Contractor will provide all his personnel, including workers, supervisors, and management personnel respiratory protection equipment. The equipment provided shall be approved by MSHA — NIOSH and accepted by OSHA for the use in atmospheres containing asbestos fibers. The contractor shall only allow those individuals that are licensed by the State and carrying an active state approved certification card and properly suited in protective clothing and respiratory protection as approved by the contractor to enter the project area.
2. Quantitative or qualitative fit tests and training is a requirement for the use of on site respiratory equipment.
3. The table RS-PF-I shall be utilized to determine the level of respiratory protection that shall be utilized during this project. At any time the maximum airborne fiber concentration outside the respirator is exceeded the next level of protection shall be required to be utilized immediately.

Required Minimum Respirator Selection for This Project

**TABLE RS - PF - I**

Respirator Selection	Protection Factor	Airborne fiber concentration outside respirator
<b>High-efficiency cartridge filter type (half face)</b>	<b>10</b>	<b>0.01 to 0.1 fiber/cc</b>
High-efficiency cartridge filter type (full face)	50	0.1 to 0.5 fibers/cc
Powered-air purifying (PAPR) (tight fit half or full face)	100	0.5 to 1.0 fiber/cc
Type C continuous flow supplied air half mask	100	0.5 to 1.0 fiber/cc
Type C continuous flow supplied air full face or hood	100	0.5 to 1.0 fiber/cc
Pressure-demand Type C (full face respirator)	1,000	0.5 to 2.0 fiber/cc

4. Powered Air Purifying Respirators are required for this project, note use on the daily log.
5. Maintain an average airborne fiber count in the work area of less than 0.5 fiber/cc. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts.

At any time airborne fiber counts exceed 1.0 fiber/cc for any period of time, cease all work. Notify the Owner's Representative immediately. Do not recommence work until authorized by the Owner's Representative of changes in work procedures to lower fiber counts.

6. All personnel will be assigned individual face pieces and corresponding units with unique identification numbers.
7. Individuals will be thoroughly trained in maintenance, repair and decontamination of respirators utilized on this project.
8. All respirators used on this project shall comply with the requirements of Section 01562.

**C. Personnel Protection**

1. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and accepted by OSHA. All work on this project shall be performed in compliance with the Table RS - PF - I in B - 3 this section.
2. Provide workers with sufficient sets of protective full body clothing (such as headgear, full body coveralls, footwear, etc.). Provide hard hats as required by applicable safety regulations. Reusable type protective clothing and footwear intended for reuse shall be left in the contaminated equipment room until the end of the asbestos abatement work, at which time such items shall be decontaminated and placed in sealed bags for transfer to the next work site. Disposable type protective clothing shall not be allowed to accumulate and shall be bagged and disposed of as asbestos contaminated waste. See Paragraph D-9.
3. Provide authorized visitors with suitable protective clothing, headgear, and footwear as described in Paragraph C-2, whenever they are required to enter the work area.

**D. Material and Equipment**

1. Deliver all materials in the original package, container, or bundles bearing the name of the manufacturer and the brand names.
2. Store all materials subject to damages off the ground, away from wet or damp surfaces and under cover sufficient to prevent damage or contamination.
3. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of in accordance with the applicable regulations.
4. Submit manufacturer's certification that vacuums, negative air pressure equipment and other local exhaust ventilation equipment conforms to ANSI Z9.2-79 as applicable to this project. Non-certified and/or modified equipment is not acceptable. An automatic shutdown system must be incorporated in the event of leakage or rupture of the HEPA filter or blockage of air due to excess material on the filters.
5. POLYETHYLENE: A minimum 6 mil sheet polyethylene on floors, 6 mil sheet polyethylene on walls, and ceilings, unless otherwise specified, in sizes to minimize the frequency of joints. Reinforced polyethylene sheeting shall be used when removal techniques may cause damage to the containment enclosure. Spray polyethylene is an acceptable alternative to polyethylene sheeting.  
  
NOTE: Use fire retardant sheeting, if a fire hazard exists and in fire egress areas.
6. TAPE: Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces and capable of adhering under both dry and wet conditions, including the use of amended water.
7. SURFACTANT: Shall consist of 50% polyethylene ether and 50% of polyoxyethylene Ester, or equivalent, and shall be mixed with water to provide a concentration of one-ounce surfactant to 5 gallons water.
8. ENCAPSULANT: For post-removal lock-down treatment, to bind residual fibers on the abated surface and on the polyethylene sheeting of the containment area.
9. DISPOSAL CONTAINERS:
  - a. Impermeable Containers: Suitable to receive and retain asbestos-containing or contaminated materials until disposal at an approved site. The containers shall be labeled in accordance with NIOSH and OSHA regulations. See paragraph D-10. Containers must be both air and water tight and must be resistant to damage and rupture. The containers shall be of two parts: (1) 6 mil polyethylene bags of a size to fit within the drum listed hereafter and capable of being sealed; (2) fiberglass containers with tight fitting lids, and/or heavy walled fiber containers with tight fitting lids. Impermeable containers shall be shipped to the dump site in a fully enclosed locking vehicle.

NOTE: Asbestos Waste Containers shall have the generator's name and facility location clearly marked on the outside of each container.

- b. Disposal Bags: Suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site. The bags must be air tight and water tight made of 6 mil polyethylene and/or asbestos materials may be wrapped in two separate layers of 6 mil polyethylene sheeting. Two disposal bags are required for disposal with asbestos waste material placed in one disposal bag and then placed into a second bag. Both bags must remain air and water tight. Disposal bags shall be labeled in accordance with OSHA and NIOSH regulations and transported to an approved dump site in a fully enclosed locking vehicle.

NOTE: Asbestos Waste Containers shall have the generator's name and facility location clearly marked on the outside of each container.

10. WARNING LABELS and SIGNS: Signs as required by OSHA regulations to demarcate a work area should read as follows:

DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE  
CLOTHING IS REQUIRED IN THIS AREA

Recommended label for waste containers:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD



9

RQ WASTE ASBESTOS  
9-NA2212-111

NOTE: Labels shall be printed in large bold letters on a contrasting background

Recommended label for transportation vehicle:

**DANGER**  
**ASBESTOS DUST HAZARD**  
**CANCER AND LUNG DISEASE HAZARD**



9

RQ WASTE ASBESTOS  
9-NA2212-111

ASBESTOS, NA2212, RQ

11. Other Materials: Provide all other materials such as lumber, nails, and hardware that may be required to construct and dismantle the contamination area and the barriers that isolate the work area.

#### **E. Commencement of Work**

Asbestos abatement work shall not commence until:

1. Arrangements have been made for proper disposal of all asbestos wastes at an EPA/State approved disposal site. Arrangements must comply with Federal, State and local regulations, transportation arrangements of wastes shall be in compliance with 40 CFR Part 61. The contractor shall notify the State regulatory agency regarding the removal project and the transportation of asbestos waste materials to the approved landfill site.
2. General security and management of the asbestos project has been completed, to include decontamination containment systems in place and parts of the building required to remain in use are effectively segregated and the temporary enclosure in place. Demarcate the asbestos project perimeter by roping off work area perimeter and the placement of appropriate warning signs. Isolation of the buildings ventilation and electrical systems, using appropriate methods.
3. Tools, equipment, material and asbestos waste containers are on hand.
4. Arrangements have been made for building security.
5. All other preparatory steps have been taken and applicable notices posted and permits are obtained.
6. Owner's Consultant and/or Testing Laboratory have been notified and are on the project site.
7. Contractor has assigned a certified project supervisor to manage the asbestos project, comply with work safety requirements, control access and who is on project site. The Project Supervisor shall have daily logs responsibility at the work site, and the project supervisor shall have his current certification posted at the project site.
8. All pre-work submittal have been approved by the Owner's Representative.
9. A project work site safety plan has been prepared by the Contractor and approved by the Owner's Representative and is available at the work site, including all MSDS sheets of any chemicals to be used at the work site.
10. Perform any other pre-work activity that may be required by Federal, State and/or local agencies to prepare site for an asbestos project. Comply with Work Practices for General Security and Management of Asbestos Projects as a state-of-the-art removal project.
11. Conduct asbestos abatement following the state-of-the-art asbestos removal procedures.

#### **F. Preparation of Work Area and Pre-Work Area Cleaning**

The work area will be prepared and cleaned using the following procedures:

- a. Clean work area as follows:
  1. Remove all personnel from the area not directly involved in the cleaning operations, insure that all the proceeding steps of section E this section have been completed.
  2. Wear an approved respirator and disposable suits for pre-cleaning operation, use dry decontamination methods, until decontamination units is completed.
  3. Pre-clean the work area using HEPA vacuum device, disposable mops, wipes and/or cloths by wet cleaning method. A combination of wet cleaning and vacuuming shall be used to clean all surfaces with in the work area. All irregular surfaces shall be cleaned using the HEPA vacuum.
  4. All items that are moveable and subject to contamination during the removal, shall be cleaned and removed from the work area. (If storage of movable items is an area with Friable ACM, re-clean items prior to returning to the cleaned work area.)

5. Dispose of all debris, mop heads, cloths, filters and disposable clothing as asbestos waste material, in accordance with asbestos disposal procedures.
  6. Copies of Transportation Manifest and Disposal Receipts from the certified landfill are required to be turned into the Owner's Representative.
- b. Isolate the work area as follows:
1. Shut down and lock out heating and ventilation system serving the work area, insure that airborne contamination from the work area cannot enter the ventilation systems.
  2. Shut down and lock out electrical systems serving the work areas, and implement measures to minimize electrical hazards such as use of ground fault interrupters.
  3. Install critical barriers seals at all doorways, windows, ventilation system openings and other openings using 6 mil thick polyethylene sheeting or reinforced sheet if high pressure water jets are used. Seal all seams, conduit and duct work passing through the work area.
  4. Install a control curtain in the doorway between the work area and the decontamination facility.
  5. This project will require the establishment of a temporary work area perimeter. Restrict access in the asbestos removal area in the building to asbestos project personnel during the course of this project.
- c. Prepare a work area enclosure as follows:

(Not required for non-friable removal if products will remain non-friable.)

1. Complete all pre-cleaning and isolation procedures. Cover all non moveable furnishings, equipment and fixtures remaining in the work area, after pre-cleaning procedure, with one or more layers of 6 mil thick polyethylene sheeting.
2. Refer to drawing (see drawings at back of specifications) for building asbestos locations and building layout set up of Decontamination Unit, Entrance Hallway, Critical Barrier Seals, Load Out Area and Negative Air Set-up.
3. Walls, ceiling and floors will be covered with a minimum of two layers of 6 mil thick polyethylene sheeting, unless concrete to be cleaned and encapsulated in cleaning procedures, to form an air tight seal. Securely affix sheeting to ensure that it will remain in position throughout the length of the project. Floor sheeting shall extend up the wall at least 12 inches. Place wall sheeting to the interior of the work area, so that moisture is shed to the interior of the work area, and extends to the floor. An additional 6 mil thick layer of sheeting shall be placed on the floor area to be used as a drop cloth during the removal phase. Repair any tears or leaks noted in the protective sheeting immediately.
4. Install or construct the personnel and equipment decontamination facility at the entry area to the work area. Form an air tight seal between the decontamination facility and the work area. If a separate load out facility is required, built it in the same manner required for the decontamination facility leaving out the shower room.
5. Install only HEPA filter equipped ventilation fans in the work area for discharge of filtered air outside the work area. Pass the negative air exhaust piping through the critical barrier seals and form an air tight seal around the duct penetrating the critical barrier. Insure that the fans will replenish the entire volume of the work area every 15 minutes. Discharge the exhausted air outside the building in an area remote from the air intake, and not in an occupied area.
6. Start the negative air equipment. A negative pressure shall be maintained continuously (24 hours/day) from the start of work in the area until the area has been decontaminated and certified clean by on site testing personnel and the filtration fans have run for a 24 hour period following final clean up procedures or as required by state regulations.

**G. Removal Notes**  
Concrete Bunker Site  
Solid Waste with Vermiculite Debris  
Troy, Montana  
October 2010



The following asbestos-containing materials are known to be present at the work site and are included in the scope of this project. If any other materials are found which are suspected of containing asbestos, notify immediately the Owner's Representative. All of the identified asbestos-containing materials and debris are to be removed.

**Troy, MT Concrete Bunker Cleanout (EMR Project Number 9458-001)**

- Remove approximately 3-4 cubic yards (CY) of soil with vermiculite debris from concrete bunker room on north end of structure..  
**Sample: TRMT-CCB-900 (Assumed Trace/<1% Tremolite Asbestos)**

**Friable Removal Procedures (Vinyl Sheet Flooring and Attached Wood Underlayment):**

- Unbolt steel plate from west side of structure
- Remove steel plate covering stairwell on top of structure
- Set up caution tape perimeter for work area
- Construct a remote 2-Stage decontamination unit/change facility
- Wet shovel soil with vermiculite debris and double bag
- Continuous misting using an airless sprayer during wet shoveling procedures.
- HEPA vacuum concrete floor areas and concrete steps into bunker room
- Perimeter air monitoring and personal air monitoring will be conducted. Air Clearance sampling not required.
- Visual inspection.
- After Removal Procedures, re-bolt steel plate to discourage access by juvenile trespassers and re-position steel plate over stairwell access.

**General Notes:**

- Coordinate all activities with all EMR contacts.
  - Power and water are not available. Contractor must have adequate power resources to operate the HEPA vacuum equipment, halogen lighting and the Owner's representative's high volume pumps for perimeter air sampling.
  - Contractor will provide adequate lighting to aid in the removal process, final cleanup/detailing, and visual inspection.
  - Pre-clean the work area per Section 01013, Part 1- General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title a-1: Pre-cleaning of Interior Areas.
  - Isolate the work area per Section 01013, Part 1-General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title b-1: Isolation of Interior Areas.
  - Prepare a work area enclosure per Section 01013, Part 1 – General, Heading F-Preparation of Work Area and Pre-Work Area Cleaning, Title c-1: Preparation of Interior Enclosures; Full Negative Pressure Enclosure.
  - BNSF track protection is NOT REQUIRED for the project. Access the site from Old Mill Road on the east side of the BNSF right-of-way.
1. There are no notification requirements.
  2. The quantity of material to be removed is to be verified by the contractor.
  3. There is no pre-cleaning required. Concrete floors and steps will be cleaned with HEPA vacuums as part of the bunker cleanout activities.
  4. Contractor shall conduct removal procedures in all functional areas in a "state-of-the-art manner." Critical barriers are not required. Waste will go to a landfill as non-ACM solid waste outside of Lincoln County.
  5. Owner Representative will be on-site to oversee project to insure compliance with specification and regulations during removal activity.
  6. Perimeter area and OSHA personal air monitoring is required for this project and will be provided by the owner's representative using phase contrast microscopy (PCM). Contractor will provide personal pumps for OSHA compliance sampling. Owner's Representative will do analysis of contractor's personal samples by PCM. No work shall be conducted without an air monitoring technician present on site.
  7. Make sure all signs and project barriers are maintained throughout the duration of the project.

8. Contractor shall proceed in work areas as scheduled and/or authorized by Owner and Owner's Representative. Changes in the work schedule shall be made by written communication.

Remove all asbestos materials by the methods listed above following the state-of-the-art procedures of the asbestos industry (see Sections 01013, 01560, 01561, 01526, 01527). All asbestos-containing and/or contaminated materials shall be properly removed and disposed of as asbestos waste.

#### **H. Clean-up and Final Air Clearance (NOT REQUIRED)**

Final project cleaning and Air Clearance will be performed as follows:

1. After the work area is visibly clean and dry, begin the final work area cleaning. Remove the polyethylene sheeting from everything and insure that all surfaces are clean and free of any visible debris.
2. Clean all previously covered surfaces of debris.
3. Not less than 24 hours after the second cleaning, the contractor will initiate final work area air monitoring to determine if the area is in compliance with the air borne contamination level for this project of 0.01 fibers/cc by the NIOSH 7400 method.
4. The final project dismantling shall not occur until the HEPA air ventilation equipment has operated for 24 hours following the initiation of the air disturbance required as a part of the final air clearance testing and approval.
5. Treat all removed plastic sheeting, waste and debris as ACM and dispose of accordingly.

It shall be the contractor's responsibility to replace or repair to the Owner's satisfaction, prior to close out of this project, all items identified as missing or damaged by the Contractor and not proven otherwise.

#### **I. References and Regulations**

Compliance with all applicable Federal, State and Local regulations and use of the best available technology, procedures and methods for preparation, execution, clean-up, disposal and safety are absolutely required. This compliance is the sole responsibility of the removal Contractor.

The intent of the specifications is to accurately describe the work that is to be performed under this contract. The Owner and Owner's Representative assume no responsibility for the proper and safe execution of the work.

#### **J. Air Monitoring and Testing (See Section 01010, Part 5)**

**END OF SECTION 01013**

## **SECTION IV**

### **AIR MONITORING DATA**

**EMR presents Section IV to provide Air Monitoring results of personnel, work area and final air clearance samples collected, documented and analyzed, which identifies the work site air conditions prior to, during and at the completion of the work required as part of the asbestos & vermiculite removal project at: Concrete Bunker Structure - EMR Project No. 9458.001, Troy, MT.**

PASS  
OR  
FAIL



BLANK AVERAGE (FIBERS/100 FIELDS)	0.0
-----------------------------------	-----

## CLEARANCE SAMPLES

CLEARANCE LEVEL	0.01
-----------------	------



DATE:	10/11/2010
PROJ. SITE MGR.:	David L. Welch
WORK AREA:	Bunker with Concrete and Dirt Floor
	Removal of Vermiculite Debris

Sample Number	Pump Number	Time On	Time Off	Total Minutes	Flow Rate (l/m - avg.)	Volume (liters)	Sample Location/Description	Fibers (-blank)	Flds	Fibers/cc	8 Hr. TWA Fibers/cc
1							Open Blank	0.0	100		
2	--	--	--	--	--	--	Sealed Blank	0.0	100	--	--
3	P-1	13:30	14:00	30	2.5	75	IWA Personal Excursion Joshua Nixon	8.0	100	0.052	0.010
4	P-1	14:00	15:30	90	2.5	225	IWA Personal-PM Joshua Nixon	17.0	100	0.037	0.010
5	HV-1	13:00	16:00	180	6.0	1080	OWA Area Decon/Entry	3.0	100	<0.002	
6											
7											
8											
Samples Collected By (Name/Signature): David L. Welch 					Date: 10/11/2010		Received by (Name/Signature):			Date: 10/11/2010	
Received by (Name/Signature):					Date:		(Laboratory) Analyzed by (Name/Signature): David L. Welch 			Date: 10/12/2010	
Turnaround Time ( ) On-site ( ) Immediate ( ) 24 Hour ( ) Normal							Comments:				
Laboratory Receiving Notes:		Custody Seal Intact?		Sample Condition:							

### Certification of Visual Inspection

Description of Work Area:	CLEANUP OF CONCRETE BUNKER, ~ 3-4 CY OF SOLID WASTE W/VERMICULITE DEBRIS.
---------------------------	--

### Contractor Certificate of Visual Inspection:

In accordance with Section 01711 "Project Decontamination" the contractor hereby certifies that he has visually inspected the above work (all surfaces including pipes, beams, ledges, walls, ceiling, and floor, decontamination unit, sheet plastic, etc..) and has found no dust, debris, or residue.

By: (Signature): Sam Wannamaker  
(Print Name): SAM WANNAMAKER  
(Print Title): C.A.S.

Company: TR5  
Date: 10-13-10

### Project Site Manager Certification:

The Project Site Manager hereby certifies that he has accompanied the contractor on his visual inspection of the described work area and verifies that his inspection has been thorough and to the best of his/her knowledge and belief, the contractor's certification above is true and honest.

By: (Signature): David L. Welch  
(Print Name): DAVID L. WELCH  
(Print Title): PROJECT SITE MANAGER

Company: EMR, Inc.  
Date: 10/11/2010

## **SECTION V**

### **ABATEMENT CONTRACTOR CLOSEOUT DOCUMENTS**

**EMR presents Section V to provide closeout documents provided by the asbestos abatement contractor as part of the asbestos & vermiculite removal project at: Concrete Bunker Structure - EMR Project No. 9458.001, Troy, MT.**

**Asbestos Abatement Post Project Record  
for  
BNSF  
Troy Bunker**

Prepared by  
Aimee Patrick  
IRS Environmental of Washington, Inc.  
IRS Project # 13025

Prepared for  
**Chris Patnode**  
**EMR, Inc.**

## **Table of Contents:**

- 1. Permits and Notifications**
- 2. Daily Project Logs**
- 3. Air Monitoring Results**
- 4. Disposal Documentation**
- 5. Worker Certification**
- 6. Worker Physical/Fit Test**



## **Permits & Notifications**

**No permits or notifications were needed for this project.**

## Daily Project Logs



WASHINGTON – OREGON – IDAHO – MONTANA  
P.O. BOX 15216 \* SPOKANE VALLEY, WA 99215-5216  
(509)927-7867 FAX (509)928-3933

ASBESTOS \* LEAD  
ENVIRONMENTAL SERVICES  
SELECTIVE DEMOLITION

## DAILY PROJECT LOG

Abatement Company: IRS Environmental of WA, Inc.

Address: 12415 E Trent Ave, Spokane Valley WA 99216/PO Box 15216, Spokane Valley, WA 99215

Project Name: BNSF Troy Montana

Project Address: Troy Montana

Job Number: 13025 Heat Stress Analysis: Forecasted Temperature 45°

Is heat stress a concern today? ☐ Yes ☒ No (Check yes if the work area will exceed 85°)

Waste Container: ☒ Drop off, ☐ Pick up, ☐ On site

Daily Report: Onsite with Dave Welch of EMR and did a job walk & developed a game plan. We removed steal plate from wall. We then regulated building via Danger Asbestos tape. Crew of 3 suited up in tyvek and half face respirators and removed approx 4 yds of soil using wet manual methods and bagged it up in feed bags. We final cleaned stairs via hepa vacuum. Dave Welch did a final inspection and liked what we did. We then tore down danger tape and loaded up all supplies, waste and equipment. We then reattached steal plate to wall.

Problems or change order work encountered today: We found that soil was contaminated with VCI-Dave decided to come back and apply a cement slurry later on in the week

Visitors & Conversations: The sherrif stopped by to see what we were up to.

Supervisors Signature: \_\_\_\_\_

Date: 10/11/2010

Day: Monday

Page: 1

of 1

## **Air Monitoring Results**

# ASBESTOS AIR SAMPLING CHAIN-OF-CUSTODY

BLANK AVERAGE (FIBERS/100 FIELDS) 0.0

CLEARANCE SAMPLES                     

CLEARANCE LEVEL 0.01

ENCLOSURE                       
 MINI-ENCLOSURE                       
 NO ENCLOSURE     X      
 GLOVEBAG                     

PASS  
OR  
FAIL



PROJECT NO. 9458-001  
 PROJECT TITLE: Concrete Bunker Solid Waste  
 CLIENT: BNSF

DATE: 10/11/2010  
 PROJ. SITE MGR.: David L. Welch  
 WORK AREA: Bunker with Concrete and Dirt Floor  
Removal of Vermiculite Debris

Sample Number	Pump Number	Time On	Time Off	Total Minutes	Flow Rate (l/m - avg.)	Volume (liters)	Sample Location/Description	Fibers (-blank)	Flds	Fibers/cc	8 Hr. TWA Fibers/cc
1							Open Blank	0.0	100		
2	--	--	--	--	--	--	Sealed Blank	0.0	100	--	--
3	P-1	13:30	14:00	30	2.5	75	IWA Personal Excursion Joshua Nixon	8.0	100	0.052	0.010
4	P-1	14:00	15:30	90	2.5	225	IWA Personal-PM Joshua Nixon	17.0	100	0.037	0.010
5	HV-1	13:00	16:00	180	6.0	1080	OWA Area Decon/Entry	3.0	100	<0.002	
6											
7											
8											
Samples Collected By (Name/Signature):						Date:		Received by (Name/Signature):		Date:	
David L. Welch <i>David L. Welch</i>						10/11/2010				10/11/2010	
Received by (Name/Signature):						Date:		(Laboratory) Analyzed by (Name/Signature):		Date:	
								David L. Welch <i>David L. Welch</i>		10/12/2010	
Turnaround Time ( ) On-site ( ) Immediate ( ) 24 Hour ( ) Normal							Comments:				
Laboratory Receiving Notes:			Custody Seal Intact?		Sample Condition:						

## **Disposal Documentation**

**Waste was disposed of as general construction debris.**

## **Workers Certification**

Sam Wannamaker

## STATE CERTIFICATIONS

CERTIFIED AS PROVIDED BY LAW AS

ASBESTOS SUPERVISOR

CERTIFICATE NUMBER: 2011020849A

EXPIRATION DATE: 03/30/2011

WANNAMAKER, SAM J

1507 E VANETTA LN

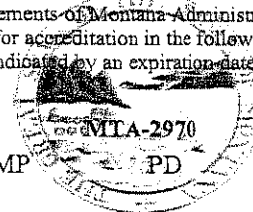
SPOKANE, WA 99217

Signature

Issued by DEPARTMENT OF LABOR AND INDUSTRIES

SAM J WANNAMAKER

has met the requirements of Montana Administrative Rule 17.74.362 and/or 17.74.363 for accreditation in the following asbestos-type occupation(s) as indicated by an expiration date(s).



CS

03/19/2011

MP

PD

IN

WK

MT DEQ Asbestos Control Program

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY  
Certified Supervisor for Asbestos Abatement Projects



Sam J. Wannamaker

CERTIFICATE NO. s12042

EXPIRATION DATE 1Mar11

TRAINING COURSE DATE 1Mar10

RENEWAL DATE 1Mar10

TRAINING ADDRESS AND TELEPHONE NO.

Asbestos Training Project  
Workplace Resources, Inc.  
1908 S.E. Pershing  
Portland, OR 97202-2340  
(503) 238-7707

The person assigned this certificate has completed the required training for asbestos certification and is certified by the Department of Environmental Quality under Title Chapter 346, Division 348 and under TSCA Title II



Johnathon Houser

## STATE CERTIFICATIONS

CERTIFIED AS PROVIDED BY LAW AS

ASBESTOS WORKER

CERTIFICATE NUMBER: 2010028517A

EXPIRATION DATE: 12/30/2010

HOUSER, JOHNATHAN

2596 N BRADLEY CT

POST FALLS, ID 83854

Signature

Issued by DEPARTMENT OF LABOR AND INDUSTRIES

JOHNATHAN HOUSER

has met the requirements of Montana Administrative Rule 17.74.362 and/or 17.74.363 for accreditation in the following asbestos type occupation(s) as indicated by an expiration date(s).

MTA-3641

CS

MP

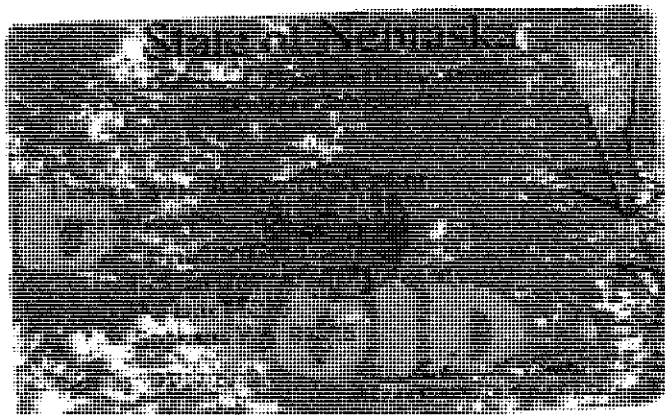
PD

IN

WK

11/13/2010

MT DEQ Asbestos Control Program



Josh Nixon

## STATE CERTIFICATIONS

CERTIFIED AS PROVIDED BY LAW AS

ASBESTOS WORKER

CERTIFICATE NUMBER: 2011028077A

EXPIRATION DATE: 07/09/2011

NIXON, JOSHUA R  
10103 E MORGAN RD  
SPOKANE, WA 99217

Signature Joshua Nixon  
Issued by DEPARTMENT OF LABOR AND INDUSTRIES

JOSHUA R NIXON

has met the requirements of Montana Administrative Rule 17.74.362 and/or 17.74.363 for accreditation in the following asbestos-type occupation(s) as indicated by an expiration date(s).



CS

MP

PD

IN

WK

06/11/2011

MT DEQ Asbestos Control Program

Environmental Safety Training Professionals, Ltd  
3035 Prospect Park Drive #110  
Rancho Cordova, CA 95670  
916 638-5550



Joshua Nixon

Has successfully completed 8 Hours  
Section 206 of TSCA Title II (AHERA)

Asbestos Worker Refresher

Course Date: 09/10/10

I.D. #: 4632

Exp. Date: 09/10/11

CERT. #: 6863

DIVISION APPROVAL #CA-006-02



Neta Snider  
Authorized Signature

## **Worker Physical/Fit Test**



Occupational Medicine  
Associates

Paula A. Lantsberger, MD, MPH, FACOEM  
Terrance D. Rempel, MD, MPH  
Royce F. Van Gerpen, MD, MPH  
Margo Cockey, ARNP

323 East Second Avenue  
Spokane, WA 99202

509.455.5555  
509.455.4114 FAX

82,978

A526979

SAM J WANNAMAKER

CSH 10/23/09

05/06/67 42 M

IRS RNV

VAN GERPEN MD MPH, ROYCE

## ASBESTOS CLEARANCE

Name: Sam Wannamaker

Date Examined: 10/23/09

**Results:** There are no detected health conditions that would place this employee at an increased risk of material health impairment from exposure to asbestos:  
**Comments:** \_\_\_\_\_

**Limitations:** Recommended restrictions on this employee or upon the use of personal protective equipment: None

Physician's statements: I have informed this employee of the results of the medical exam and of any medical conditions resulting from asbestos exposure that require further explanation or treatment.

I have also informed this employee of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

Physician signature: [Signature] 10-23-09  
Lantsberger, Rempel, Van Gerpen, Cockey

Examination: Height: 73" Weight: 207 B/P: 126/90 Pulse: 68

	<u>Normal</u>	<u>Abnormal</u>	
Ears:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TMs intact
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Canals clear
Mouth:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear / no obstruction
Neck:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Supple / no masses
Lungs:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear A + P
Heart:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Regular Rate / no murmur
Abdomen:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No mass / no organomegally
Lymphatics:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No lymphadenopathy

PFTs: ☒ Normal ☐ Abnormal ☐ Unacceptable ☒ No change

CXR: ☒ Normal ☐ Abnormal ☐ Unacceptable ☒ No change



CONT. REC. NO. IRSEW1033PN

WASHINGTON-OREGON-IDAHO-MONTANA

P.O. BOX 15216 \* SPOKANE VALLEY, WA 99215-5216  
(509) 927-7867 FAX (509) 928-3933

ASBESTOS\*LEAD  
ENVIRONMENTAL  
SERVICES

### QUALITATIVE FIT TEST RECORD

Name: SAM WANNAMAKER

Issue Date: 10-6-10

Soc. Sec. No.: On File

Expiration Date: 10-6-11

Test Operator: GREG BURGER

TYPE OF QUALITATIVE FIT TEST: IRRITANT SMOKE

#### RESPIRATOR

Respirator brand: North

NIOSH Approval #: TC-21C-152

Model: 7700

Wear at least 10 minutes: X

Size: Small       
Med. X  
Lrg.     

+/- Pressure fit check: X

#### TEST

Each exercise is performed for one minute

Normal Breathing-No talking

Deep breathing-be certain breaths are deep

Turn head side to side-Inhale on each side, do not bump  
the respirator against shoulders

Move head up and down-Inhale when head is in full up position,  
do not bump respirator against chest.

Reading-with eyes closed, repeat slowly and clearly after the  
conductor the "Rainbow Passage"

Jogging in place-Jog in place

Normal breathing-No talking

Pass

Fail

✓

✓

✓

✓

✓

✓

✓

✓

✓

FINAL FIT: PASS

Supervisor Signature: [Signature]

Employee Signature: [Signature]

\*\* Employee must have a current qualitative fit test before assigning them a task that requires a respirator to be worn.



Occupational Medicine  
Associates

Paula A. Lantsberger, MD  
Terrence D. Rempel, MD  
Royce F. Van Gerpen, MD  
Margo Cockey, ARNP

323 East Second Avenue  
Spokane, WA 99202

509.455.5555  
509.455.4114 FAX

JOHNATHON HOUSER 2/16/10 M  
8/21/84 25

IRS ENVIRONMENTAL  
DR. LANTSBERGER

## ASBESTOS CLEARANCE

Name: Johnathon Houser

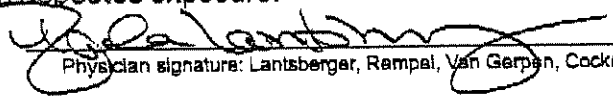
Date Examined: 2/16/10

**Results:** There are are not detected health conditions that would place this employee at an increased risk of material health impairment from exposure to asbestos:  
Comments: \_\_\_\_\_

Limitations: Recommended restrictions on this employee or upon the use of personal protective equipment: \_\_\_\_\_

Physician's statements: I have informed this employee of the results of the medical exam and of any medical conditions resulting from asbestos exposure that require further explanation or treatment.

I have also informed this employee of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

  
Physician signature: Lantsberger, Rempel, Van Gerpen, Cockey

Examination: Height: \_\_\_\_\_ Weight: \_\_\_\_\_ B/P: \_\_\_\_\_ Pulse: \_\_\_\_\_

	<u>Normal</u>	<u>Abnormal</u>	
Ears:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TMs intact
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Canals clear
Mouth:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear / no obstruction
Neck:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Supple / no masses
Lungs:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear A + P
Heart:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Regular Rate / no murmur
Abdomen:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No mass / no organomegally
Lymphatics:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No lymphadenopathy

PFTs: ☒ Normal ☐ Abnormal ☐ Unacceptable ☒ No change

CXR: ☐ Normal ☐ Abnormal ☐ Unacceptable ☐ No change



CONT. REC. NO. IRSENW1033PN

WASHINGTON-OREGON-IDAHO-MONTANA

P.O. BOX 15216 \* SPOKANE VALLEY, WA 99215-5216  
(509) 927-7867 FAX (509) 928-3933

ASBESTOS\*LEAD  
ABATEMENT  
SELECTIVE DEMOLITION

## QUALITATIVE FIT TEST RECORD

Name: Johnathon Houser

Issue Date: 3/22/10

Soc. Sec. No.: ON file

Expiration Date: 3/22/11

Test Operator: Darin Dietz

TYPE OF QUALITATIVE FIT TEST: IRRITANT SMOKE

### RESPIRATOR

Respirator brand: North

NIOSH Approval #: TC-21C-152

Model: 7700

Wear at least 10 minutes: yes

Size: Small       

+/- Pressure fit check: yes

Med.       

Lrg. X

### TEST

Each exercise is performed for one minute

Pass

Fail

Normal Breathing-No talking

X

Deep breathing-be certain breaths are deep

X

Turn head side to side-Inhale on each side, do not bump  
the respirator against shoulders

X

Move head up and down-Inhale when head is in full up position,  
do not bump respirator against chest.

X

Reading-with eyes closed, repeat slowly and clearly after the  
conductor the "Rainbow Passage"

X

Jogging in place-Jog in place

X

Normal breathing-No talking

X

FINAL FIT: Pass

Supervisor Signature: [Signature]

Employee Signature: [Signature]

\*\* Employee must have a current qualitative fit test before assigning them a task that requires a respirator to be worn.



Occupational Medicine  
Associates

Paula A. Lantsberger, MD, MPH, FACOEM  
Terrence D. Rempel, MD, MPH  
Royce F. Van Gerpen, MD, F  
Margo Cockey, ARNP

323 East Second Avenue  
Spokane, WA 99202

509.455.5555  
509.455.4114 FAX

93, 886

A526979

JOSHUA R NIXON

CSH 04/02/10

10/26/73 36 M

IRS ENVIRO

REMPER, TERRENCE D

## ASBESTOS CLEARANCE

Name: Josh Nixon

Date Examined: 4/2/10

**Results:** There are/are not detected health conditions that would place this employee at an increased risk of material health impairment from exposure to asbestos:

Comments: \_\_\_\_\_

Limitations: Recommended restrictions on this employee or upon the use of personal protective equipment: \_\_\_\_\_

Physician's statements: I have informed this employee of the results of the medical exam and of any medical conditions resulting from asbestos exposure that require further explanation or treatment.

Q have also informed this employee of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

Physician signature: Lantsberger, Rempel, Van Gerpen, Cockey

Examination: Height: 6'0 Weight: 217 B/P: 118/80 Pulse: 74

	<u>Normal</u>	<u>Abnormal</u>	
Ears:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TMs intact
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Canals clear
Mouth:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear / no obstruction
Neck:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Supple / no masses
Lungs:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clear A + P
Heart:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Regular Rate / no murmur
Abdomen:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No mass / no organomegally
Lymphatics:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No lymphadenopathy

discussed smoking cessation

PFTs: ☒ Normal ☐ Abnormal ☐ Unacceptable ☐ No change

CXR: ☒ Normal ☐ Abnormal ☐ Unacceptable ☐ No change





CONT. REG. NO. IRSENWI033PN

WASHINGTON-OREGON-IDAHO-MONTANA

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ASBESTOS\*LEAD  
ENVIRONMENTAL  
SERVICES

### QUALITATIVE FIT TEST RECORD

Name: Josh Nixon

Issue Date: 9/10/10

Soc. Sec. No.: on-file

Expiration Date: 9/10/11

Test Operator: R. Spence

TYPE OF QUALITATIVE FIT TEST: IRRITANT SMOKE

#### RESPIRATOR

Respirator brand: North

NIOSH Approval #: TC-21C-152

Model: 7700

Wear at least 10 minutes: ✓

Size: Small       

+/- Pressure fit check: good

Med.       

Lrg. ✓

#### TEST

Each exercise is performed for one minute

Pass

Fail

Normal Breathing-No talking

✓

Deep breathing-be certain breaths are deep

✓

Turn head side to side-Inhale on each side, do not bump  
the respirator against shoulders

✓

Move head up and down-Inhale when head is in full up position,  
do not bump respirator against chest.

✓

Reading-with eyes closed, repeat slowly and clearly after the  
conductor the "Rainbow Passage"

✓

Jogging in place-Jog in place

✓

Normal breathing-No talking

✓

FINAL FIT: PASS

Supervisor Signature: [Signature]

Employee Signature: Joshua Nixon

\*\* Employee must have a current qualitative fit test before assigning them a task that requires a respirator to be worn.